

Remarks

The amendments are desired entry in order to limit the present claims to catalyst compositions wherein the cocatalyst is selected from certain aluminum compounds, noninterfering oxidizing agents, and mixtures of cocatalyst compounds. The use of individual alkylaluminoxane, Lewis acid, or ammonium salt cocatalysts is no longer encompassed by the present claims. The new claim language is well supported by the existing specification's recitation of cocatalysts that are selected from alkylaluminoxanes, aluminum alkyls, aluminum halides, aluminum alkylhalides, Lewis acids, ammonium salts, noninterfering oxidizing agents, and mixtures thereof, found at page 13, lines 19-30 (which is identical to the original disclosure at page 16, lines 3-16 in Applicant's priority application 07/545,403, filed July 3, 1990).

Discussion

Applicants' claims are 1-6. Claims 1 and 2 are objected to due to the misspelling of the word "azide". This has been corrected in the present claim language.

Claims 1-6 stand rejected, provisionally, under the judicially created doctrine of obviousness-type double patenting over claims 146-151 and 176-181 of copending application 07/545,403. In the rejection, the examiner cited the teachings of later published, non-prior art, and stated, "it is clear that the art understands aluminoxanes to be Lewis acids".

As amended, individual Lewis acids, ammonium salts and aluminoxanes are excluded from applicants' claims. Only compositions comprising aluminum alkyls, aluminum halides, aluminum alkylhalides, noninterfering oxidizing agents, and mixtures of alkylaluminoxanes, mixtures of Lewis acids, mixtures of ammonium salts, and the other recited mixtures are now claimed. Because the foregoing mixtures are not specifically claimed in the '403 application, the relation of species and genus alleged to exist between the two sets of claims no longer exists. To the extent the present claims include an alumoxane, it must be as part of a mixture. Accordingly, the separate sets of claims are considered to be patentably distinct one from another.

Claims 1-6 stand additionally rejected under the judicially created doctrine of obviousness-type double patenting over claims 13-21 of USP 5,425,872, claims 1-5 of USP 5,399,635, and claims 4-8 and 10-21 of USP 6,015,868. With regard to this rejection, the examiner stated, "Although the conflicting claims are not identical, they are not patentably distinct from each other because, in each case, the instant claims are of similar or greater

scope than those already patented, and the use of titanium metal is specifically named in each set of patented claims."

First, with respect to any of the presently claimed compositions based on a mixture of cocatalysts, the present claims are believed to be clearly patentable over any of the cited patent claims for the same reasoning presented with respect to the previously discussed double patenting rejection.

With respect to any remaining claimed subject matter not limited to the use of a mixture of cocatalysts, applicants first maintain that the delay in issuing the present claims has resulted primarily from actions initiated by the United States Patent and Trademark Office, specifically numerous interferences involving parent application 07/545,403. During the pendency of these interferences, which have only recently concluded, further prosecution of the application was suspended. Accordingly, in such situation, the appropriate standard of review with respect to an obviousness-type, double patenting rejection is the so-called one-way distinctness determination. That is, the examiner must initially show that both sets of claims are obvious in view of the other set in order to establish a *prima facie* case of obviousness-type double patenting. Because both one way and in certain cases, even two-way distinctness is believed to exist between the present claims and those of all the foregoing issued patents, the rejection is believed to be in error, and accordingly is traversed.

USP 5,425,872 claims 13-21 are directed to an addition polymerization process employing a specific cationic composition prepared by an electrochemical technique, which composition must include an inert, compatible, non-coordinating anion, A⁻. The examiner has failed to point out where the present claims recite the use of such an electrochemical activating technique or any recognized generic equivalent thereto. Moreover, the present claims clearly do not recite the anion, A⁻, which is specifically required in the patent claims. The use of noninterfering oxidizing agents, i.e., a chemical oxidant, is clearly nonanalogous to use of electricity as an activation technique. Neither the reaction conditions, the reagents, or the ultimate product are necessarily the same or similar as alleged by the examiner. In addition, the examiner has offered no evidence that use of a non-interfering oxidizing agent would necessarily result in formation of a catalyst species containing the anion, A⁻, as opposed for example to a zwitterionic species. Thus, not only do the present claims and the reference claims possess one-way distinctness, they possess two-way distinctness as well, and are non-obvious thereover regardless of the legal standard of obviousness employed. Accordingly, the examiner's conclusion that the present claims "are of similar or greater" scope is unsupported by any evidence of record or thorough analysis of the claim language, inadequate to establish that the patent claims are in fact a species within the scope of the

present claims or *prima facie* obvious there over, and certainly inadequate to satisfy the requirements of a conclusion of obviousness type double patenting.

Similarly, claims 1-5 of USP 5,399,635 relate to an addition polymerization process utilizing a catalyst prepared by contacting a specific metal complex with a carbonium salt cocatalyst containing a non-coordinating compatible anion. Once again, the examiner has presented no evidence to support a conclusion that carbonium salts are an obvious choice of noninterfering oxidizing agent for use with the particular metal complexes of interest (as opposed for example to silver salts or ferrocenium salts recited in the application), or otherwise made an adequate showing of the obviousness of the patent's claims in view of the present claims. In particular, the record is devoid of any evidence that use of a non-interfering oxidizing agent would necessarily result in formation of a catalyst species containing the anion, A⁻, as recited in the '635 reference, as opposed, for example, to a zwitterionic species.

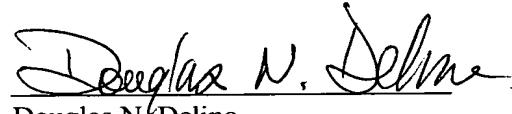
Once again it is maintained that the present claims and the reference claims possess not only one-way distinctness but they actually possess two-way distinctness as well. The present claims are considered to be non-obvious over those of the '635 reference regardless of the legal standard of obviousness employed. Accordingly, the examiner's conclusion that the present claims "are of similar or greater" scope is unsupported by any evidence of record or thorough analysis of the claim language, inadequate to establish that the patent claims are in fact a species within the scope of the present claims or *prima facie* obvious there over, and certainly inadequate to satisfy the requirements of a conclusion of obviousness type double patenting.

In the final cited reference, USP 6,015,868, claims 4-8 and 10-21 are directed to certain Group 4 metal complexes containing specifically substituted indenyl functionality and catalytic derivatives thereof. With respect to claims 10 and 11 the rejection is clearly in error, in as much as these claims relate to metal complexes, *per se*, and not to compositions comprising an activator. With respect to the remaining claims, this final basis for rejection is also believed to be in error since the equivalent European publication to the '868 patent, EP-A-416,815, was fully considered during prosecution of the '868 patent, and the claims of the '868 patent were found to be patentable over the teachings of EP-A-416,815. Accordingly, the Office has already determined the one-way distinctness of the '868 claims over the complete teachings of the present application. As previously stated, since the delay in issuance of the present claims is due to Office procedures rather than the actions of the applicant, it must be concluded in view of this prior determination by the Office, that the present claims are patentably distinct from those of the '868 patent.

In view of the foregoing facts and observations and the presently submitted amendments to applicants' claims, it must be concluded that the Examiner's conclusions regarding the obviousness of the present claims over pending applications and previously issued, co-assigned patents of The Dow Chemical Company is unsupported by the full record and cannot be maintained.

Reconsideration of the previously entered rejections of applicants claims 1-6 and allowance thereof at the present time is requested. Early favorable consideration is solicited.

Respectfully submitted,



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